Amendments to the Claims:

This listing of the claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (withdrawn) A printer system comprising a printer and an ink supply, the printer arranged to print a location pattern comprising a plurality of dots adapted to be read by a pattern reader, the system being further arranged to modify one or more characteristics of the dots substantially in dependence upon the quantity of ink in the supply.

2. (withdrawn) A system according to claim 1, arranged to modify the size of the dots.

3. (withdrawn) A system according to claim 1, arranged to modify the shape of the dots.

4. (withdrawn) A system according to claim 1, arranged to print dots having a first set of characteristics when the quantity of ink is determined to be above a predetermined threshold and to print dots having a second set of characteristics when the quantity of ink is determined to be below the predetermined threshold.

5. (withdrawn) A system according to claim 4, wherein the dots printed with the second set of characteristics are larger than the dots printed with the first set of characteristics.

6. (withdrawn) A system according to claim 5, wherein the dots printed with the first and second sets of characteristics have substantially the same shape.

7. (withdrawn) A system according to claim 5, wherein the dots printed with the first and second sets of characteristics have different shapes.

8. (withdrawn) A system according to claim 7, wherein the dots having the first set of characteristics are substantially "L" shaped.

9. (withdrawn) A system according to claim 7, wherein the dots having the second set of characteristics are substantially "T" shaped.

10. (withdrawn) A system according to claim 4, arranged to detect three or more ranges in the quantity of ink in the supply and is further arranged to print dots having a corresponding set of characteristics at each of the ranges.

11. (withdrawn) A system according to claim 1, wherein each of the plurality of dots has a nominal position offset in one of a plurality of directions, such as above, below, to the left and to the right, from the intersection point of a virtual grid.

12. (withdrawn) A system according to claim 1, wherein the modification of the one or more characteristics of the dots substantially does not alter the nominal position of each dot.

13. (withdrawn) A system according to claim 1, wherein the printer is a digital printer.

14. (withdrawn) A system according to claim 13, wherein the printer is an inkjet printer, a LED printer, a LCD printers, or a liquid electrophotographic printers.

15. (withdrawn) A system according to claim 13, wherein the printer also functions as a photocopier.

16. (withdrawn) A system according to claim 13, wherein the printer has a resolution of approximately 600 dpi.

17. (withdrawn) A system according to claim 1, wherein the dots are printed in IR absorbing ink.

18. (withdrawn) A system according to claim 1, adapted to print the location pattern without human-discernible content.

19. (withdrawn) A system according to claim 1, adapted to print the location pattern and human-discernible content on the same carrier.

20. (withdrawn) A method of generating a location pattern comprising a plurality of dots, comprising the steps of:

receiving data relating to the degree of deterioration or wear associated with one or more elements of an ink supply; and,

selecting characteristics of the pattern dots in dependence upon the received data.

21. (withdrawn) A method according to claim 20, further comprising the step of requesting pattern information from a pattern database.

22. (withdrawn) A method according to claim 20, further comprising the step of generating a print file comprising pattern area having dots with the selected characteristics.

23. (withdrawn) A method according to claim 22, further comprising the step of printing the print file on a printer associated with the ink supply.

24. (withdrawn) A method according to claim 22, wherein the data corresponds to the quantity of ink in the supply.

25. (cancelled) A computer program or a printer driver comprising program code means for performing the method steps of claim 20 when the program is run on a computer and/or other processing means associated with suitable apparatus.

26. (currently amended) A printer system comprising a printer and an ink supply, the printer arranged to print a location pattern comprising a plurality of dots adapted to be read by a pattern reader, the system being further arranged monitor a variable associated with the printing process and to modify the size of the dots in dependence upon the monitored variable, wherein the pattern reader is an external digital pen configured to read the location pattern and write using human readable ink when operated by a user.

27. (currently amended) A system according to claim 26, wherein the monitored variable is **[[**the**]]** an ambient temperature or humidity.

28. (withdrawn) A printer system comprising a printer and an ink supply, the printer arranged to print a location pattern comprising a plurality of dots adapted to be read by a pattern reader, the system being further arranged to modify one or more characteristics of the dots substantially in dependence upon a variable associated with the ink supply.

29. (withdrawn) A system according to claim 28, wherein the variable provides an indication of the current level of deterioration of the ink supply or wear associated with one or more elements of the ink supply.

30. (withdrawn) A system according to claim 29, wherein the variable provides an indication of the cumulative degree of use of the ink supply.

31. (withdrawn) A system according to claim 29, wherein the variable is the quantity of ink in the supply.

32. (withdrawn) A location pattern system comprising a printer adapted to print location patterns made up of a plurality of dots and a pattern reader adapted to detect the printed dots, the system being adapted to print patterns having a dot size dependent upon a variable associated with an associated ink supply at substantially the time of printing, such that the dot detection response of the pattern reader is maintained substantially constant between patterns printed when the ink supply contained substantially different levels of ink.